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DERWENT-WEEK: 199712

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TITLE: Light diode matrix manufacture with
x-y coordinate addressing - involves formation of
address p-rails on base containing gallium alloy by zone
melting and recrystallisation

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PATENT-FAMILY:

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LANGUAGE	PAGES	MAIN-IPC
SU 1347831 A1		July 10, 1996
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APPLICATION-DATA:

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SU 1347831A1	N/A	
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ABSTRACTED-PUB-NO: SU 1347831A

BASIC-ABSTRACT:

Address p-rails in x direction are made by zone melting using a temp gradient perpendicular to the base (1) plane. The working elements (6) on the face side are made by local thermal oxidation across the epitaxial layer thickness at the temp of 1033 - 1073 deg. K in the nitrogen-oxygen mixture

containing 40 - 60 % of oxygen. These elements are subject to conventional switching in the y direction at the epitaxial layer side. The address p-rails are formed by local application of the masking layer on the base made of gallium alloy containing germanium or zinc in the quantity of 2 - 4 %. The temp gradient is 20 - 40 deg. K / cm and the recrystallisation rate is 5 - 200 microns per hour.

USE/ADVANTAGE - Method is used in manufacture of integrated semiconductor circuits. Percentage of good products is increased.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: LIGHT DIODE MATRIX MANUFACTURE COORDINATE
ADDRESS FORMATION
ADDRESS P RAIL BASE CONTAIN GALLIUM ALLOY ZONE
MELT
RECRYSTALLISATION

DERWENT-CLASS: U12

EPI-CODES: U12-A01A1A; U12-A01A3;

SECONDARY-ACC-NO:
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